

REPORT DOCUMENTATION PAGE

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6. AUTHOR(S) David J. Nesbitt, JILA/NIST Univ. of Colorado				
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Gordon Research Conferences URI PO Box 984 West Kingston RI 02892-0984			8. PERFORMING ORGANIZATION REPORT NUMBER AFOSR-TR-97 0320	
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12a. DISTRIBUTION / AVAILABILITY STATEMENT Approved for public release; distribution unlimited.			12b. DISTRIBUTION CODE	
13. ABSTRACT (Maximum 200 words) The Gordon Conference on Atomic and Molecular Interactions was held in New London, New Hampshire at Colby Sawyer College from June 30 to July 5, 1996. The conference was very well attended (over 110 attendees, see attached lists) by a broad spectrum of people from academia, industry and government laboratories, both US and foreign scientists, senior researchers, young investigators, postdoctorals and graduate students. The funds from the AFOSR were used to subsidize graduate student and postdoctoral conference fees, as well as help defray travel costs for the invited speakers and session chairs. INFO COLLECTED 11/10/90				
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August 25, 1997

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110 Duncan Avenue, Suite B115
Bolling Air Force Base
Washington DC 20332-8080

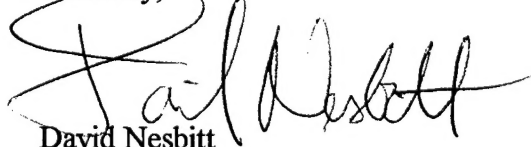
Final Report: Gordon Research Conference

The Gordon Conference on Atomic and Molecular Interactions was held in New London, New Hampshire at Colby Sawyer College from June 30 to July 5, 1996. The conference was very well attended (over 110 attendees, see attached lists) by a broad spectrum of people from academia, industry and government laboratories, both US and foreign scientists, senior researchers, young investigators, postdoctorals and graduate students. The funds from the AFOSR were used to subsidize graduate student and postdoctoral conference fees, as well as help defray travel costs for the invited speakers and session chairs.

In designing the formal speakers program, emphasis was placed on current unpublished research and discussion of future target areas in the field. The time for formal presentations was limited in the interest of group discussions, which followed each of the talks. Poster sessions were held on each of the conference nights (Monday-Thursday) in order that more opportunities for communication of recent research results could be provided. Attached is a list of the formal speaker program and poster sessions. In addition to these formal interactions, free time was scheduled to promote more informal scientific discussions, which are of course very important in fostering new collaborations and joint efforts in the field.

As you know, in the interest of promoting the presentation of the very latest and ground-breaking results (which are therefore typically unpublished), Gordon Research Conference does not permit publication of any proceedings or abstracts associated with the meeting. If you wish for any further details, please feel free to contact me. Once again, I would like to thank the AFOSR for their support of the Atomic and Molecular Interactions Gordon Conference.

Sincerely,



David Nesbitt

1996 Chair, Atomic and Molecular Interactions Gordon Conference



19971002 087

**1996 Gordon Research Conference
Atomic and Molecular Interactions**

David Nesbitt (chair, JILA/University of Colorado)
Robert Wyatt (vice-chair, University of Texas)

- A. Sunday PM: **State-to-State Dynamics** (session chair, John Zhang, New York University)
1. Henning Meyer, University of Bern/University of Georgia, "Counterpropagating pulsed molecular beam scattering"
 2. Joel Bowman, Emory University, "Quantum and classical photodissociation calculations of ICN and Ar-H₂O respectively"
 3. Fleming Crim, University of Wisconsin, "State-to-state dynamics and controlled bond cleavage"
- B. Monday AM: **Highly Quantum Systems** (session chair, Roger Miller, University of North Carolina)
1. Takeshi Oka, University of Chicago, "Spectroscopy and dynamics of the highly quantum system; Parahydrogen crystal"
 2. Birgitta Whaley, University of California, Berkeley, "Doped quantum clusters - superfluids and superclusters"
 3. Peter Toennies, Max Planck Institute, Goettingen, "High resolution molecular spectroscopy in liquid helium droplets"
- C. Monday PM: **New Physics with Laser Cooled Atoms** (session chair, John Weiner, University of Maryland)
4. Carl Wieman, JILA/University of Colorado, "Bose-Einstein condensation in ultracold gas"
 5. David Pritchard, MIT, "Atom interferometers and their scientific applications"
- D. Tuesday AM: **Reactions in Clusters** (session chair, David Clary, Cambridge University)
1. Marsha Lester, University of Pennsylvania, "Spectroscopy and reaction dynamics of OH-H₂/D₂ entrance channel complexes"
 2. Zlatko Bacic, New York University, "Quantum dynamics of small hydrogen-bonded clusters"
 3. Jean Paul Visticot, Orsay, "Cluster isolated chemical reaction"
- E. Tuesday PM: **Molecular Ion Clusters** (session chair, Tim Zwier, Purdue University)
4. Evan Bieske, University of Melbourne, "Infrared studies of proton-bound complexes: He, Ne and Ar atoms attached to HN₂⁺ and HCO⁺"
 5. Dan Neumark, Berkeley, "Time-resolved studies of photodissociation in negative ions"
- F. Wednesday AM: **Atomic and Molecular Scale Imaging** (session chair, Paul Weiss, Pennsylvania State University)
1. Charles Lieber, Harvard University, "Chemical force microscopy: probing and imaging intermolecular interactions in solution"
 2. Jay Trautman, Bell Labs
 3. W.E. Moerner, IBM/University of California, San Diego, "Optical spectroscopy of individual molecules in solids"
- G. Wednesday PM: **Molecule-Surface Interactions** (session chair, Bruce Kay, Pacific Northwest Lab)
4. Ron Naaman, Weizmann Institute, Rehovot, Israel, "Electron transfer through organized organic films-monitored by scattering and other methods".
 5. Andy Kummel, University of San Diego, "Chemisorption dynamics of interhalogen molecules"
- H. Thursday AM: **Photomolecular Interactions** (session chair, Laurie Butler, University of Chicago)
1. Alec Wotdke, University of California, Santa Barbara, "Collisional energy transfer in highly vibrationally excited O₂"
 2. Pat Vacarro, Yale University, "Sub-doppler nonlinear spectroscopy as a probe of photodissociation dynamics"
 3. David Chandler, Sandia National Laboratories, Livermore, "Multiphoton photofragment imaging: The non resonant photodissociation of H₂, D₂ and H"
- I. Thursday PM: **Interatomic Forces in Ions** (session chair, Jeremy Hutson, University of Durham)
4. Alan Carrington, University of Southampton, "Ion beam microwave spectroscopy: Studies of long-range atom/atomic ion interactions"

GORDON RESEARCH CONFERENCES
CHAIRMAN'S CONFERENCE APPLICANT REPORT
As Of 21-JUN-96

REC'D: _____
ENT'D: _____

LIST #: 15
ACCPT: _____

CONFERENCE #: 96-S-CS2-4
CONFERENCE TOPIC: ATOMIC & MOLECULAR INTERACTIONS
CONFERENCE LOCATION: COLBY-SAWYER (2) CONFERENCE DATE: JUN-30-96

CONFERENCE CHAIR: DAVID NESBITT

APPLICANT NAME ORGANIZATION	APPLIC #	DATE SENT TO CHRMN	STATUS	PARTIC	NEW STATUS	SPEC FUND
FRANCOIS G AMAR UNIVERSITY OF MAINE	1001256	MAY-20-96	RGSTD	POSTR		
DAVID T ANDERSON UNIVERSITY OF COLORADO	1001456	MAY-15-96	RGSTD	POSTR		
FRANCISCO J AOIZ UNIVERSIDAD COMPLUTENSE	1001871	MAR-15-96	ACCPT	POSTR		
ZLATKO BACIC NEW YORK UNIVERSITY	1002860	APR-05-96	RGSTD	SPKR		465.00
DELOY BAUGH UCLA	1004180	MAY-23-96	ACCPT	POSTR		
DEIRDRE A BELLE-ODRY CORNELL UNIVERSITY	1004772	MAY-13-96	RGSTD	POSTR		
CHRISTOPHER J BENDER ALBERT EINSTEIN COLLEGE OF MED	1095710	MAR-15-96	RGSTD	POSTR		
EVAN BIESKE THE UNIVERSITY OF MELBOURNE	1005860	APR-05-96	RGSTD	SPKR		465.00
DAVID A BLANK UNIVERSITY OF CALIFORNIA	1006313	MAY-15-96	RGSTD	POSTR		
JOEL BOWMAN EMORY UNIVERSITY	1097884	APR-05-96	RGSTD	SPKR		465.00
PHILIP R BROOKS RICE UNIVERSITY	1008385	MAR-29-96	RGSTD	POSTR		
ROBERT BUKOWSKI UNIVERSITY OF WARSAW	1099105	APR-19-96	RGSTD	POSTR		
PHIL BUNKER NRC OTTAWA CANADA	1096436	MAR-15-96	RGSTD	POSTR		
LAURIE J BUTLER UNIVERSITY OF CHICAGO	1009561	APR-05-96	RGSTD	DISCL		465.00
ALAN CARRINGTON UNIVERSITY OF SOUTHAMPTON	1097882	APR-05-96	RGSTD	SPKR		465.00
GREGORZ CHALASINSKI UNIVERSITY OF WARSAW	2095568	MAR-15-96	RGSTD	POSTR		
DAVID CHANDLER SANDIA NATIONAL LABORATORIES	1011240	APR-05-96	RGSTD	SPKR		465.00
YONGQIN CHEN UNIV. OF CALIFORNIA, BERKELEY	1011907	MAY-31-96	ACCPT	POSTR		
CHENG-CHI CHUANG HARVARD UNIVERSITY	1100757	MAY-17-96	ACCPT	POSTR		

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DAVID C CLARY UNIVERSITY COLLEGE LONDON	2012983	MAR-15-96	RGSTD	DISCL		465.00
ROBERT E CONTINETTI UNIVERSITY OF CALIFORNIA, SAN	2013810	APR-23-96	RGSTD	ATTND		
F. FLEMING CRIM UNIVERSITY OF WISCONSIN	1014642	APR-05-96	RGSTD	SPKR		465.00
CAROLINE E DESSENT YALE UNIVERSITY	1086000	MAR-15-96	RGSTD	POSTR		
LAURA DODECK CORNELL UNIVERSITY	1100870	MAY-20-96	RGSTD	POSTR		
RAINER A DRESSLER PHILLIPS LABORATORY, USAF	1018212	MAY-13-96	RGSTD	POSTR		
RONALD J DUCHOVIC INDIANA UNIVERSITY, PURDUE UNI	1018402	MAR-15-96	RGSTD	POSTR		
PATRICK DUPRE GRENOBLE HIGH MAGNETIC LABORAT	1099469	APR-25-96	RGSTD	POSTR		
JEANETTE FISS UNIVERSITY OF ILLINOIS	1100695	MAY-15-96	RGSTD	POSTR		
PATRICK E FLEMING TULANE UNIVERSITY	1097773	APR-01-96	RGSTD	POSTR		
IGOR K GALETICH INST FOR LOW TEMP PHYS, UKRAIN	1096120	MAR-15-96	RGSTD	POSTR		
MARK C GARNER UNIVERSITY OF CALIFORNIA AT SA	1099135	APR-22-96	RGSTD	POSTR		
GREGORY I GELLENE TEXAS TECH UNIVERSITY	1024410	MAR-15-96	RGSTD	POSTR		
EDWARD F GREENE BROWN UNIVERSITY	1026758	MAR-29-96	RGSTD	POSTR		
STEVEN J GULDING UNIVERSITY OF CALIFORNIA	1100754	MAY-17-96	RGSTD	POSTR		
GREGORY E HALL BROOKHAVEN NATIONAL LABORATORY	1028197	MAY-02-96	RGSTD	POSTR		
HENDRIK HAMANN UNIVERSITY OF COLORADO	1100693	MAY-15-96	RGSTD	POSTR		
JEANNE M HOSSENLOPP MARQUETTE UNIVERSITY	1032135	APR-02-96	RGSTD	POSTR		
PAUL L HOUSTON CORNELL UNIVERSITY	1032216	MAR-15-96	CANCL	ATTND		

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JEREMY M HUTSON UNIVERSITY OF DURHAM	2033114	MAR-15-96	RGSTD	DISCL	465.00
BOGUMIL JEZIORSKI THE UNIVERSITY OF WARSAW	1099104	APR-19-96	RGSTD	POSTR	
BRUCE D KAY PACIFIC NORTHWEST NATIONAL LAB	3036780	MAR-29-96	RGSTD	SPKR	465.00
JAMES S KELLER UNIVERSITY OF NOTRE DAME	2037020	MAY-16-96	RGSTD	POSTR	
PAUL KLEIBER UNIVERSITY OF IOWA	1038288	MAR-22-96	RGSTD	POSTR	
ALAN E.W. KNIGHT GRIFFITH UNIVERSITY	1038620	MAY-17-96	ACCPT	ATTND	
WEI KONG OREGON STATE UNIVERSITY	1039101	MAY-08-96	RGSTD	POSTR	
BRENT D KOPLITZ TULANE UNIVERSITY	1039193	MAR-15-96	RGSTD	ATTND	
JOHN R KRENOS RUTGERS, THE STATE UNIVERSITY	1039766	APR-02-96	RGSTD	ATTND	
M. KRISHNAMURTHY JILA	1100273	MAY-09-96	RGSTD	POSTR	
ANDY KUMMELL UNIVERSITY OF SAN DIEGO	1097881	APR-05-96	RGSTD	SPKR	465.00
ROBERT J LE ROY UNIVERSITY OF WATERLOO	1084386	APR-01-96	RGSTD	ATTND	
SUNGYUL LEE KYUNGHEE UNIVERSITY, KOREA	1042267	MAR-15-96	RGSTD	POSTR	
MARSHA I LESTER UNIVERSITY OF PENNSYLVANIA	2042817	MAR-22-96	RGSTD	SPKR	465.00
KEN G LIBBRECHT CALTECH	1097538	MAR-29-96	CANCL	ATTND	
CHARLES M LIEBER HARVARD UNIVERSITY	2043423	APR-05-96	RGSTD	SPKR	465.00
LI LIU BROOKHAVEN NATIONAL LABORATORY	1101764	JUN-14-96	ACCPT	ATTND	
K. THOMAS LORENZ TULANE UNIVERSITY	1096804	MAR-15-96	RGSTD	POSTR	
VICTOR F LOTRICH UNIVERSITY OF DELAWARE	1099741	APR-30-96	RGSTD	POSTR	

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H. PETER LU PACIFIC NORTHWESTERN NATIONAL	1096505	MAR-15-96	RGSTD	POSTR	
STUART MACKENZIE	1100692	MAY-15-96	CANCL	ATTND	
JORG MAIN UNIVERSITY OF SOUTHERN CALIFOR	1100493	MAY-13-96	RGSTD	POSTR	
ERIC MAS UNIVERSITY OF DELAWARE	1099740	APR-30-96	RGSTD	POSTR	
HOWARD MAYNE UNIVERSITY OF NEW HAMPSHIRE	1047672	MAR-15-96	RGSTD	POSTR	
RUTH MC DIARMID NATIONAL INSTITUTES OF HEALTH	1047795	JUN-07-96	RGSTD	ATTND	
ANNE B MCCOY THE OHIO STATE UNIVERSITY	1100533	MAY-14-96	RGSTD	POSTR	
J. DOUGLAS MCDONALD UNIVERSITY OF ILLINOIS	1048194	APR-01-96	RGSTD	POSTR	
RUTH I MCKAY CORNELL UNIVERSITY	1048466	MAY-13-96	RGSTD	ATTND	
MIKHAIL M MESTECHKIN INSTITUTE OF PHYS-ORGANIC & CO	2090133	MAR-15-96	CANCL	POSTR	
HENNING MEYER UNIVERSITY OF GEORGIA	1097883	APR-05-96	RGSTD	SPKR	465.00
CHRIS A MICHAELS COLUMBIA UNIVERSITY CHEMISTRY	1049563	APR-15-96	RGSTD	POSTR	
ROGER E MILLER UNIVERSITY OF NORTH CAROLINA/C	1049968	APR-05-96	RGSTD	DISCL	465.00
W E MOERNER UCSD	1050502	APR-05-96	RGSTD	SPKR	465.00
JAMES T MUCKERMAN BROOKHAVEN NATIONAL LABORATORY	1051600	APR-30-96	RGSTD	POSTR	
RON NAAMAN WEITZMANN INSTITUTE	1052244	MAY-15-96	RGSTD	SPKR	465.00
DAVID NESBITT UNIVERSITY OF COLORADO	1053041	MAR-29-96	RGSTD	CHAIR	465.00
DAN NEUMARK U.C. BERKELEY	1053124	MAR-15-96	RGSTD	SPKR	465.00
JAY A NIESSE UNIV OF NEW HAMPSHIRE	1053494	MAR-15-96	RGSTD	POSTR	

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SIMON NORTH BROOKHAVEN NATIONAL LAB	1100740	MAY-16-96	RGSTD	ATTND		
TAKESHI OKA UNIVERSITY OF CHICAGO	2095316	APR-23-96	RGSTD	SPKR		465.00
LEONARD PIPES UCLA	1100918	MAY-23-96	ACCP	ATTND		
DAVID E PRITCHARD MIT	2059139	APR-05-96	RGSTD	SPKR		465.00
CHARLES X. W QIAN UNIVERSITY OF VICTORIA	1099260	APR-23-96	RGSTD	ATTND		
YANHUI QIU NEW YORK UNIVERSITY	1099106	APR-19-96	RGSTD	ATTND		
RICHARD L REDINGTON TEXAS TECH UNIVERSITY	1089018	APR-29-96	RGSTD	POSTR		
JAMES H REHO PRINCETON UNIVERSITY	1099596	APR-29-96	RGSTD	POSTR		
STEPHEN B ROSS CALTECH	1097539	MAR-29-96	CANCL	ATTND		
ALEXANDER RUDAVETS MPHTI	2099606	MAY-08-96	ACCP	POSTR		
DUBRAVKO SABO NEW YORK UNIVERSITY	1099108	APR-19-96	RGSTD	POSTR		
JOANNA SADLEJ UNIVERSITY OF WARSAW	1100133	MAY-07-96	RGSTD	POSTR		
CHARLES SCHMUTTENMAER YALE UNIVESITY	2065480	APR-29-96	RGSTD	POSTR		
REBECCA SCHWARTZ UNIVERSITY OF PENNSYLVANIA	1096613	MAR-15-96	RGSTD	POSTR		
AMIT SINHA UNIVERSITY OF CALIFORNIA	1068636	MAY-20-96	RGSTD	POSTR		
PETER E SISKI UNIVERSITY OF PITTSBURGH	1068723	APR-30-96	RGSTD	POSTR		
JAMES J SLOAN UNIVERSITY OF WATERLOO	1086234	MAR-15-96	CANCL	ATTND		
JOHN E SMEDLEY BATES COLLEGE	1069047	APR-23-96	RGSTD	POSTR		
MARK SMITH UNIVERSITY OF ARIZONA	1084759	APR-29-96	RGSTD	POSTR		

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EIL SNIDER NORTHWESTERN UNIVERSITY	1069463	MAR-29-96	RGSTD	ATTND	
IMOTHY P SOFTLEY OXFORD UNIVERSITY	1069607	APR-30-96	RGSTD	POSTR	
ARIANNE SOWA RESAT UC SAN DIEGO	1099136	APR-22-96	RGSTD	POSTR	
RZYSZTOF SZALEWICZ HARVARD UNIVERSITY	1085141	APR-15-96	RGSTD	ATTND	
USIE TAYLOR SOUTHAMPTON UNIVERSITY	1099468	APR-25-96	RGSTD	ATTND	
PETER TOENNIES MAX-PLANCK-INST FUR STROMUNGSGF	2074485	APR-05-96	RGSTD	SPKR	465.00
MICHAEL R TOPP UNIVERSITY OF PENNSYLVANIA	1074709	MAR-15-96	ACCPT	POSTR	
AY K TRAUTMAN SBQ LTD.	2074939	APR-05-96	RGSTD	SPKR	465.00
USY N TSANG HARVARD UNIVERSITY	1100756	MAY-17-96	RGSTD	POSTR	
ULIA UPPENBRINK SCIENCE	1095712	MAR-15-96	RGSTD	ATTND	
ATRICK H VACCARO YALE UNIVERSITY	1076007	APR-05-96	RGSTD	SPKR	465.00
MICHAEL VAKSMAN UNIVERSITY OF DETROIT MERCY	1095534	MAR-15-96	RGSTD	POSTR	
ANTONIO J. C VARANDAS UNIVERSIDADE DE COIMBRA	1101408	JUN-07-96	RGSTD	ATTND	
JEAN-PAUL VISTICOT COMMISIARIAT A WENERGIE ATOMIQ	1077378	APR-05-96	RGSTD	SPKR	465.00
ANDREJ VOTAVA JILA	1101410	JUN-07-96	RGSTD	ATTND	
STEPHEN P WALCH NASA AMES RESEARCH CENTER	1077963	MAY-16-96	RGSTD	POSTR	
MARK C WALL BOSTON UNIVERSITY	1100635	MAY-15-96	ACCPT	POSTR	
ANDY WALTON UNIVERSITY OF MARYLAND	1097422	MAR-29-96	RGSTD	POSTR	
JOHN WEINER UNIVERSITY OF MARYLAND	2095790	APR-05-96	RGSTD	DISCL	465.00

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PAUL S WEISS THE PENNSYLVANIA STATE UNIV	1079390	APR-05-96	RGSTD	DISCL		465.00
K. BIRGITTA WHALEY UNIVERSITY OF CALIFORNIA, BERK	1079814	APR-08-96	RGSTD	SPKR		465.00
CARL E WIEMAN UNIVERSITY OF COLORADO	1080194	APR-05-96	RGSTD	SPKR		465.00
CARL J WILLIAMS JFI/NIST	1100494	MAY-13-96	RGSTD	POSTR		
SKIP WILLIAMS GPID	1100535	MAY-14-96	RGSTD	POSTR		
FRANK J WODARCZYK NATIONAL SCIENCE FOUNDATION	1081155	APR-01-96	RGSTD	ATTND		
ALEC M WODTKE UNIV OF CALIFORNIA, SANTA BARB	1081158	APR-05-96	RGSTD	SPKR		465.00
SCOTT A WRIGHT JOHNS HOPKINS UNIVERSITY	1099467	APR-25-96	RGSTD	POSTR		
ROBERT E WYATT UNIVERSITY OF TEXAS	1081953	MAR-15-96	RGSTD	VCHR		465.00
HAO XU STANFORD UNIVERSITY	1099034	APR-18-96	RGSTD	POSTR		
MARK A YOUNG UNIVERSITY OF IOWA	1085300	APR-02-96	RGSTD	POSTR		
VEYSEL ZENGIN UNIVERSITY OF CALIFORNIA AT SA	1099137	APR-22-96	RGSTD	POSTR		
JOHN ZHANG NEW YORK UNIVERSITY	1097886	APR-05-96	RGSTD	DISCL		465.00
LANGCHI ZHU UNIVERSITY OF ILLINOIS	1083803	MAY-15-96	RGSTD	ATTND		
TIMOTHY S ZWIER PURDUE UNIVERSITY	1084389	APR-05-96	RGSTD	DISCL		465.00

=====

ATTENDEES AVAILABLE:	12
GUESTS AVAILABLE	9
TOTAL	0
OPEN	0
ATTENDEES ACCEPTED	123
REGISTERED	113
CANCELLED	6
WAIT LISTED	0
CLOSED OUT	0
GUESTS ACCEPTED	1

APPROVED BY: _____

DATE: _____

1996 GORDON CONFERENCE
ATOMIC AND MOLECULAR INTERACTIONS

i

MONDAY POSTERS

(please take these posters down by 12 noon on Tuesday)

1. Anderson, David Davis, S. Nesbitt, D.
Slit Jet Discharges: A Novel, Intense Source of Supersonically Cooled Radicals and Molecular Ions
2. Belle-Oudry, Deirdre McKay, R. Westley, M. Houston, P.
Studies of the Reaction of OH Radicals with Organophosphates
3. Bender, Christopher
Pulsed Electron Magnetic Resonance as a Probe of Weak Interactions in Supramolecular Assemblies
4. Blank, David North, Simon Stranges, D. Suits, A Lee, Y. T.
The Photodissociation of DMSO-h6 and DMSO-d6 at 193nm Studied by Photofragment Translational Spectroscopy
5. Bukowski, Robert Jeziorski, B Szalewicz, K
Basic Set Superposition Problem in Interaction Energy Calculations... Saturated second- and third-order Energies for He₂
6. Bunker, P. R.
The Proton Rearrangement Dynamics and Spectrum of CH₅⁺
7. Chalasinski, Grzegorz
Ab Initio Studies of Open-Shell Interactions
8. Chen, Y.
Femtosecond time-resolved photoelectron spectroscopy
9. Clary, D. C. Gregory, J. K.
Quantum Simulation of Water Clusters
10. Continetti, R. Hanold, K. Garner, M.
Photoelectron/photofragment angular correlations and energy partitioning in the dissociative photodetachment of O₄⁻
- Dessent, Caroline Serxner, D Johnson, M. A. Bailey, G. Kim, J.
 11. Observation of the Precursor to Charge-Transfer-to-Solvent Bands of Solvated Iodine in Small Gas Phase Clusters.
 12. Infrared Spectroscopy of Negative Ion Clusters: Hydrated Electrons and Hydrated Iodide I⁻(H₂O)
13. Dodeck, L. Kong, W. Hepburn, J. Houston, P.
Photodissociation Dynamics of Glyoxal
14. Dressler, Rainer Bastian, M Levandier, D Murad, E
Collision-Induced Dissociation and Photodissociation Studies of the (N₂O.H₂O)⁺ Cluster Ion
15. Duchovic, R. J. Pettigrew, J. D. Welling, B. Shipchandler, T.
A Fundamental Combustion Process: H(D)+O₂
16. Dupre, Patrick Muller, T Zhang, Q Vaccaro, P. H.
Spectroscopy of the S₂O Ground Electronic State: Comparison between DLIF and SEP-DFWM Techniques
17. Fiss, Jeanette Zhu, Langchi Wada, R Gordon, R
Control the Product Distribution in the Photo-Excitation of DI with Coherent Laser Fields
18. Fleming, Patrick Cowen, K Lorenz, K Herman, M Koplitz, B
Nuclear Hyperfine Populations in the Ground State of Atomic Hydrogen Using Velocity-Aligned Doppler Spectroscopy
19. Galetich, Igor
Experimental Study of Protein-Nucleic Acid Base Interactions Involving Amide Group
20. Garner, Mark Hanold, K. Resat, M. Continetti, R.
Dissociation Dynamics of the Low-Lying Excited States of O₃

TUESDAY POSTERS

(please take these posters down by 12 noon on Wednesday)

1. Greene, E. F. Meli, C. A. Yang, H.
Similarities in the Reconstruction of Ge(111) and Si(111) Surfaces at High Temperatures and a Model for Them
2. Gulding, S Hou, H. Wodtke, A. Auerbach, D. Rettner, C.
State-Specific Alignment of Hydrogen Desorbed from Cu(111)
- Hall, Gregory North, S. Sears, T.
3. Transient FM Spectroscopy: Applications in Chemical Dynamic, Spectroscopy and Kinetics
4. Unimolecular Dissociation of NCCN
5. Hossenlopp, Jeanne Zhang, Y Christophy, E Myli, K
Investigation of Photodissociation Processes in Complex Molecules
6. Hurwitz, Y. Stern, P. Naaman, R.
Reactivity Induced by Complex Formation: The Reaction of $O(^3P)$ with HCl Dimers
7. Jeziorski, Bogumil Korona, T Moszynski, R
Convergence Properties of Perturbation Theory for Interaction of He and H_2 with He
8. Keller, James Dowd, T Miller, L Schehr, C Burca, G
Two-Color, Laser-Induced Grating Spectroscopy: a Multidimensional Probe of Excited State Dynamics
- Kleiber, Bruce Wong, T. Cheng, Y. Chen, J. Freel, C. Ding, L.
9. Chemical Dynamics of $Mg^*/Mg^{+*}-CH_4$ Reactions
10. Photodissociation Spectroscopy of $Mg_2^+-CO_2/H_2O/CH_4$ Ion-Molecule Complexes
11. Knight, Alan Bradley, A Butz, K
Internal Rotor-Overall Rotation Interactions in Substituted Toluenes: Comparison of Theory and Experiment
12. Kong, Wei Lai, S. Y. Broughton, S.
Photochemistry of diazines in the ultraviolet
13. Krenos, John Rickey, D
Molecular Beam Study of the Collisions of State-Monitored, Metastable Noble Gas Atoms with $O_2(X^3E_g^-)$
14. Krishnamurthy, M. Gouw, J Bierbaum, V Leone, S
Cluster Ion Mobilities: Ionic Structures and Interaction Potentials
15. Lee, Sungyul
Selective Production of Photofragments along Asymmetric Resonances in OH Photodissociation
16. Libbrecht, Ken Boyd, R Bliss, J
Progress Toward Achieving Bose-Einstein Condensation in Gaseous Cesium
17. Lotrich, Victor Szalewicz, K
Symmetry-Adapted Perturbation Theory of Three-Body Nonadditivity of Ar
- Gellene, Gregory Yoo, R. Sharpe, S.
18. Symmetry Induced Kinetic Isotope Effects in the Formation of $Ar-CO_2^+$
19. *Ab Initio* Investigations of Polyiodide Anions

WEDNESDAY POSTERS

(please take these posters down by 12 noon on Thursday)

1. Lu, Peter Xie, X. S.
Room Temperature Studies of Single Molecule Spectroscopy and Chemical Dynamics
2. Main, Jorg Taylor, H.
Physical Interpretation of Dynamical Processes in Small Molecules Exhibiting Chaos
3. Mas, Eric Szalewicz, K.
Effects of Monomer Geometry on Depth of Water Dimer Potential and Evaluation of Potential Energy Surface
4. Mayne, Howard Niesse, J. A.
Global Minimization of Small Clusters Using the Space- Fixed Modified Genetic Algorithm Approach
5. McCoy, Ann
Theoretical Studies of Chemical Reactions in Clusters: Transition State Dynamics of Ar_n (ClHCl)
6. Mestechkin, Mikhail
Hartree-Fock Instability Threshold, Molecular Size, and Molecular-ion Transition
7. Michaels, Chris Mullin, A. S. Flynn, G. W.
Collisional Quenching of Highly Vibrationally Excited Pyrazine by CO_2 : Excitation of the $(10^0_0)\dots$ Bath Vibrational Modes
8. Oian, Charles Looock, H. Cao, J.
The Nonadiabatic Photodissociation of BrNO at 355nm
9. Pipes, L. C. Baugh, D.
Complete Chemical Reactions: The Photofragmentation of Polarized Molecules
10. Qiu, Yanhui Bacic, Z.
Full-Dimensional Bound State Calculations for HCl Dimer
11. Redington, Richard
The Cyclobutadiene $\text{CB} \cdot \text{Ar}$, $\text{CB} \cdot \text{CO}$, and $\text{CB} \cdot \text{CO}_2$ Complexes; the Ar/CB Matrix System
12. Reho, J. Higgins, J. Stienkemeier F Ernst, W. Lehmann, K. Gutowski, M. Scoles, G.
Spectroscopy and Photoinduced Chemical Dynamics of High Spin Alkali Trimers
13. Resat, S. Zengin, V. Hanold, K. Continetti, R. E.
Dissociative Photodetachment and Photodissociation of N_3O_2^-
14. Ross, Stephen Lang, S. Lucke, S. Kanorsky, S. Weis, A. Hansch, T.
Atomic Spectroscopy of Cesium Trapped in Solid Helium
15. Rudavets, Alexandr Akulin, V. M. Dykhne, A. M. Dubovitskii, V. A.
Photon Echo of Photodissociation by Properly Tailored Laser Pulses
16. Sabo, D. Bacic, Z.
Three-Dimensional Model Calculations of Torsional Levels of $(\text{H}_2\text{O})_3, \dots$
17. Sadlej, J. Williams, H. Szalewicz, K.
Symmetry-Adapted Perturbation Theory for the Interaction of Two CO_2 Molecules
18. Schuttenmaer, Charles
Femtosecond THz Pulse Spectroscopy: A Unique Tool
19. Schwartz, Rebecca Giancarlo, L. Bonn, R. Loomis, R. Lester, M.
Intermolecular Vibrations and Relaxation Dynamics of $\text{OH} \cdot \text{N}_2$ Complexes
20. Sinha, A. Barnes, R. Gross, A.
Photodissociation Dynamics of Vibrationally Excited Molecules: HN_3 and H_2O

THURSDAY POSTERS

(please take these posters down by Friday morning at 9AM)

1. Siska, Rebecca Longley, E. J.
Penning Ionization Dynamics: Coupling between Recoil Angle and Recoil Energy
2. Smedley, J. E. Coulter, S. K. Zomlefer, K.
Energy Transfer in Ba(5d7p) 3D_1 Rare Gas Collisions
3. Smith, Mark
Ion-Molecule and Radical Molecule Reaction Rates in Supersonic Flows
4. Softley, T. P. Mackenzie, S. R. Rolland, D. Dickinson, H.
Production and Reaction of Rotationally State-Selected Ions Using Pulsed-Field Techniques
5. Szalewicz, Krzysztof
Symmetry-Adapted Perturbation Theory of Intermolecular Interactions
6. Tsang, Susy Chuang, C-C Klemperer, W.
Overtone Spectroscopy and Intermolecular Vibrational State Dependence of the Predissociation Rate of N_2HF
7. Vaksman, Michael Podgorski, I.
Surface Light-Induced Flux Magnitude at Different Radiation Intensities
8. Varandas, A. J. C. Wang, W.
On the $O_2(v') + O_2(v'')$ Atmospheric Reaction: a Quasiclassical Trajectory Study
9. Wall, Mark Wilson, E. L. Kennedy, M. Mullin, A. S.
Energy Dependent Single Collision Energy Transfer: Probing of the Bath Gas to Understand Collisional Quenching
10. Walch, S. P.
Theoretical Studies of the HO/HO_2 Catalytic Cycle for Ozone Destruction
11. Walton, Andy
Genetic Algorithm for Determination of Global Minima of Atomic Clusters
12. Williams, Carl
Obtaining Precise Information from Photoassociation Spectroscopy
13. Williams, Skip Rahn, L. Zare, R. N.
Effects of Different Population, Orientation, and Alignment Relaxation Rates in Resonant Four-Wave Mixing
14. Wright, S. Dagdigan, P. J.
Excited State Dynamics of the NCO Free Radical
15. Xu, Hao Low, R. J. Shafer-Ray, N. Zare, R. N.
Measurement of the State Resolved Differential Cross Section for the Reaction $H + D_2$ at 2.2 eV
16. Young, Mark
Photofragment Kinetic Energy Release in Hydrogen-Bonded and Charge Transfer Complexes
17. Zengin, V. Strong, K. M. Hanold, K. A. Continetti, R. E.
Study of the Low-lying Electronic States of CCO by Photoelectron Spectroscopy of CCO^-
18. Zwier, T. Pribble, R. N. Gruenloh, C.
Resonant Ion-Dip Infrared Spectroscopy of Hydrogen Bonded Clusters
19. Hamann, H. F. Kokubo, T. Gallagher, A. Nesbit, D.
Near-Field Interactions of Molecules with Surfaces and Microstructures as probed by Fluorescence Properties
- Muckerman, J. Kaluza, M.
20. Bright-State Expansion and Optimal Control of Bond Selective IR Multiphoton Dissociation of linear HCCD
21. Bond Selective IR Multiphoton Excitation and Dissociation of linear HCCD